

**BUFFERING AND SEQUENCING OF SOFT  
DECISIONS OF MULTIPLE CHANNELS INTO  
A SINGLE SHARED BIORTHOGONAL DECODER**

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**ABSTRACT**

The invention is a receiver and a method of receiving data having a preferred application in a satellite receiver in accordance with the invention includes a memory (114) including an addressable storage array which stores  
10 a sequence of data samples contained in a time division multiplexed signal from a plurality channels (X, Y and Z) and outputs the stored data samples in a sequence of data groups with each data group containing a plurality of samples from one of the plurality of channels; and a decoder (116), responsive to the data groups, which decodes the data samples within the data groups and outputs decoded data  
15 samples.